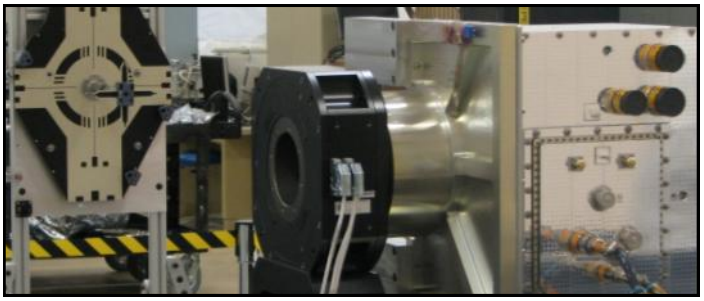
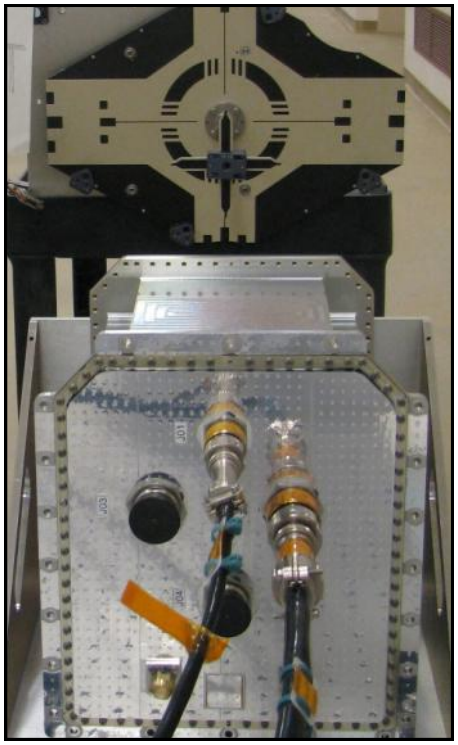
ORION
CREW EXPLORATION VEHICLE

WEEKLY ACCOMPLISHMENTS

03.05.10

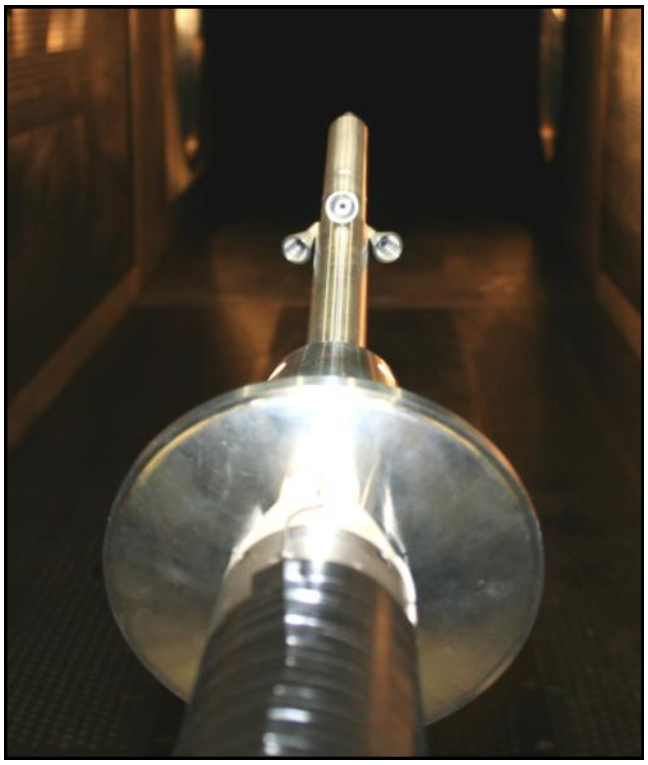
Significant progress continues on the overall integration of the Launch Abort System (shown above and in banner) for Pad Abort 1. The electrical system is now fully integrated and the raceway cover installation has begun. In addition, successful softmate testing was conducted this week, finishing two days ahead of schedule. The team is in the beginning stages of Phase testing and will begin the countdown/countup testing next week.





The Sensor Test for Orion RelNav Risk Mitigation (STORRM) Team continues ground testing prior to delivery to Kennedy Space Center for launch on STS-134. The ground testing successfully demonstrated that the Vision Navigation Sensor (VNS) can operate from 5.5 kilometers to just under 2 meters. Testing of the DTO augmented target (shown above with blue elements mounted to the ISS visual target along with the STORRM Sensor Enclosure Assembly (SEA) was performed at 2 meters in Ball Aerospace's clean-room. Additional testing was performed (shown right) with a target to sensor separation of 41 inches (1.04 meters), clearly meeting the 2.0 meter requirement.

A test of the NASA Crew Exploration Vehicle (CEV) in the Launch Abort System (LAS) configuration was carried out in the Boeing Polysonic Wind Tunnel facility in St. Louis, Missouri. The primary objective of this test (shown right) was to provide some quick look aerodynamic force and moment data on the LAS for comparison and validation with computational fluid dynamics (CFD) simulations. A secondary objective was to provide some limited AOA (Angle of Attack) data for the Alternate Launch Abort System.



Final Integration has begun on the Attitude Control Motor for the demonstration motor test at Elkton, MD. Battery integration is scheduled over the next few days, which is the final major piece to be integrated prior testing on March 17th.